

## CLAIMS

- 1        1. An apparatus for sorting and selecting parts, comprising;
- 2              a computer for designing a plurality of a first type of component parts and a plurality
- 3              of a second type of component parts, said plurality of first component parts and said plurality
- 4              of second component parts defining a job, and wherein said computer assigns a unique job
- 5              identification for said job and a part identification for each of said component parts;
- 6              a first tooling machine computer-controller, coupled to said computer, for receiving
- 7              said plurality of first component part designs, creating tooling instructions for said first
- 8              component parts from said first component part designs, and creating labels for each of said
- 9              first component parts, said labels including said unique job identification and said part
- 10             identification;
- 11             a first tooling machine, coupled to said first tooling machine computer-controller, for
- 12             receiving said first component part tooling instructions, receiving material for said plurality
- 13             of said first component parts, and creating said first component parts;
- 14             a second tooling machine computer-controller, coupled to said computer, for receiving
- 15             said plurality of second component part designs, inputting said unique job identification,
- 16             inputting said part identifications for at least one of said plurality of first component parts, and
- 17             creating tooling instructions for said second component parts from said second component
- 18             part designs; and
- 19             a second tooling machine, coupled to said second tooling machine computer-controller,

20 for receiving said second component tooling instructions, receiving material for said second  
21 component parts, and creating said second component parts for each of said inputted first  
22 component part identifications.

1       2. The apparatus according to claim 1, wherein said first tooling machine computer-  
2 controller is configured to replace said computer.

1       3. The apparatus according to claim 1, wherein said first tooling machine is a metal  
2 cutting machine and said second tooling machine is a liner cutting machine.

1       4. The apparatus according to claim 1, wherein said label includes a bar code  
2 representation of said unique job identification and said part identification.

1       5. The apparatus according to claim 1, wherein said label includes a zone identification  
2 indicating location of said first component part.

1       6. The apparatus according to claim 1, wherein said first tooling machine computer-  
2 controller optimizes the yield of said first component part material and said second  
3 tooling machine computer-controller optimizes the yield of said second component  
4 part material.

1       7.     The apparatus according to claim 1, wherein said created plurality of first component  
2                  parts and said created plurality of second component parts are combined to form a  
3                  fitting.

1       8.     The apparatus according to claim 7, wherein said plurality of first component parts,  
2                  said plurality of second component parts, and a previously created fitting define said  
3                  job.

1       9.     A method for sorting and selecting parts, comprising the steps of:  
2                  designing a plurality of a first type of component parts and a plurality of a second type  
3                  of component parts, said plurality of first component parts and said plurality of second  
4                  component parts defining a job;  
5                  assigning a unique job identification for said job;  
6                  assigning a part identification for said each of said component parts;  
7                  providing a first tooling machine computer-controller for receiving said plurality of  
8                  first component part designs, creating tooling instructions for said first component parts from  
9                  said first component part designs, and creating labels for each of said first component parts,  
10                 said labels including said unique job identification and said part identification;  
11                 providing a first tooling machine for receiving said first component part tooling  
12                 instructions, receiving material for said plurality of said first component parts, and creating  
13                 said first component parts;

14           providing a second tooling machine computer-controller for receiving said plurality  
15       of second component part designs, inputting said unique job identification, inputting said part  
16       identifications for at least one of said plurality of first component parts, and creating tooling  
17       instructions for said second component parts from said second component part material; and  
18           providing a second tooling machine for receiving said second component part tooling  
19       instructions, receiving material for said second component parts, and creating said second  
20       component parts for each of said input first component part identifications.

- 1       10.      The method according to claim 9, wherein said first tooling machine computer-  
2           controller is configured to facilitate said designing step, said job identification  
3           assigning step, and said part identification assigning step.
- 1       11.      The method according to claim 9, wherein said first tooling machine is a metal cutting  
2           machine and said second tooling machine is a liner cutting machine.
- 1       12.      The method according to claim 9, wherein said label includes a bar code representation  
2           of said unique job identification and said part identification.
- 1       13.      The method according to claim 9, wherein said label includes a zone identification  
2           indicating location of said first component part.

1 15. The method according to claim 9, wherein said created plurality of first component  
2 parts and said created plurality of second component parts are combined to form a  
3 fitting.

1 16. The method according to claim 15, wherein said plurality of first component parts, said  
2 plurality of second component parts, and a previously created fitting define said job.